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RAW SEQUENCE LISTING DATE: 12/29/2000
PATENT APPLICATION: US/09/462,480 TIME: 11:58:22

Input Set : A:\ES.txt
Output Set: N:\CRF3\12292000\I462480.raw

3 <110> APPLICANT: GICQUEL, BRIGITTE
4 BERTHET, FRANCOIS-XAVIER
5 ANDERSEN, PETER
6 RASMUSSEN, PETER BIRK
8 <120> TITLE OF INVENTION: POLYNUCLEOTIDE FUNCTIONALLY CODING FOR THE LHP PROTEIN FROM MYCOBACTERIUM
9 TUBERCULOSIS, ITS BIOLOGICALLY ACTIVE DERIVATIVE FRAGMENTS, AS WELL AS METHODS
10 USING THE SAME
12 <130> FILE REFERENCE: 0660-0165-0XPCT
14 <140> CURRENT APPLICATION NUMBER: 09/462,480
15 <141> CURRENT FILING DATE: 2000-03-06
17 <150> PRIOR APPLICATION NUMBER: PCT/IB98/01091
18 <151> PRIOR FILING DATE: 1998-07-16
20 <150> PRIOR APPLICATION NUMBER: 60/052,631
21 <151> PRIOR FILING DATE: 1997-07-16
23 <160> NUMBER OF SEQ ID NOS: 34
25 <170> SOFTWARE: PatentIn version 3.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 1277
29 <212> TYPE: DNA
30 <213> ORGANISM: Mycobacterium tuberculosis
32 <400> SEQUENCE: 1
33 ctgcacgcagg tgacgtcggtt gttcagccag gtggggcgca cccggcgccgg caacccagcc 60
35 gaegaggaag ccgcgcagat ggccgtgttc ggcaccagtc cgctgtcgaa ccatcccgctg 120
37 gctgggtgtat caggcccccc cgccggggcgcc ggccgtgttc gccggggatc gctaccgtgc 180
39 gcaagggtgggt cgttgcacccg caegccgcgtg atgtctcgtg tgatcgaaaa ggcgggttgc 240
41 ccctcggtga tgccggcgcc tggccggca tggccgtgtga cgggtggcgcc cgctcccggtg 300
43 ggtccgggaaq cgatggggcca gggttcgcaaa tccggcggtt ccaccagccc gggctctgtc 360
45 ggcggccac cgctcgccca ggagcgltgaa gaagacgcaag aggacgactg ggacgaagag 420
47 gacgactgtt gagctcccgat aatgacaaaca gacttcggccg ccacccggc cggaaactt 480
49 gccaacattt tggcgaaqaa ygttaaagqaa gaaagttagtc cagcatqgca gagatqgaga 540
51 ccgatcgccgc taccctcggtt caggaggccg qtaalttcgta gggatctcc ggcgacactga 600
53 aaacccagat cgaccaggat gaggccgcggg cagggttcgtt qcaaggccag tggccggcg 660
55 cggcggggaae ggcccccggcc gcccgggtgg tgcgttccca agaaycagcc aataagcaga 720
57 agcaggaaact cgacgaaatc tggacgaaata ttcqtcggc cggcgttccaa tactcgaggg 780
59 ccgacgaggaa gcaacggccg qggctgtccct cgcggatgggg ctctgtgaccc gtaataacgaa 840
61 aaagaaacgg agcaaaaaca tgacgagaca qcaatggggat ttcggggqta tccaggccgc 900
63 ggcaacggccgc atccggggaa atgcacgtc catttcattcc ctctgtgaccc agggggaaagca 960
65 gtcctcgacc aagctcgccg cggccgtgggg cggtagcggt tggaggcggtt accagggtgt 1020
67 ccagcaaaaa tggqacqccca cggccatccgaa gtcgaaacac gtcgtgcaga acctggcgcc 1080
69 gacgtatcgcg gaaggccgcgc agccaaatggc ttcgaccggaa ggcaacgtca ctggalgtt 1140
71 cgcatagggc aacccggatc tccgtgtggaa tagcggaaaca cgggatcgccg ctagttcgac 1200
73 cttecggtgg ttcgtggccctt ttcgtgtttt atacgttta gtcgtgcaga acctggcgcc 1260
75 atggggccgc actacgaa 1277
78 <210> SEQ ID NO: 2
79 <211> LENGTH: 524
80 <212> TYPE: DNA
81 <213> ORGANISM: Mycobacterium tuberculosis

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See p. 5

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83 <400> SEQUENCE: 2
84 ctgcacgagg tgacgtcggt gttcagccag gtggggggca ccggcgccgg caacccagcc 60
85 gacuaggaaq ccgcgcagat gggccgtctc ggcacccagtc cgctgtcgaa ccatccgtcq 120
88 gctgggtggat caggccccag cgcggggcgcq ggcctgtcgc ggcggggatc gtcacccgtgc 180
90 qcagggtgggt cgttgaccggc caccggctgtc atgttcgtc tgatcgaaa gccgggtgc 240
92 ccctcggtga tggccggggc tggccggca tggccgggtga cgggtggcgc cgcgtccgggtg 300
94 qgcgcggggaa cgtatggggca tccqacggctt ccaccggccc gggctgtcq 360
96 qcgcggggcac cgcgtccggca gggatcgatc gaaagacgacg aggacgactg ggacgaaagaa 420
98 gacgactgtt gagctcccgat aatgacaaca gacttccggc ccacccgggc cggaaagactt 480
100 gccaacattt tggccggggaa ggttaagaga gaaagtatgc cgc 524
103 <210> SEQ ID NO: 3
104 <211> LENGTH: 481
105 <212> TYPE: DNA
106 <213> ORGANISM: *Mycobacterium tuberculosis*
108 <400> SEQUENCE: 3
109 ctgcacgagg tgacgtcggt gttcagccag gtggggggca ccggcgccgg caacccagcc 60
111 gacgaaaggccgcg acgcgcagat gggccgtctc ggcacccagtc cgctgtcgaa ccatccgtcq 120
113 gctgggtggat caggccccag cgcggggcgcq ggcctgtcgc ggcggggatc gtcacccgtgc 180
115 qcagggtgggt cgttgaccggc caccggctgtc atgttcgtc tgatcgaaa gccgggtgc 240
117 ccctcggtga tggccggggc tggccggca tggccgggtga cgggtggcgc cgcgtccgggtg 300
119 ggtccggggag cgtatggggca tggatcgatc tccggccggc ccacccggccc gggctgtgc 360
121 ggcggggcac cgcgtccggca gggatcgatc gaaagacgacg aggacgactg ggacgaaagaa 420
123 gacgactgtt gagctcccgat aatgacaaca gacttccggc ccacccgggc cggaaagactt 480
125 g
128 <210> SEQ ID NO: 4
129 <211> LENGTH: 302
130 <212> TYPE: DNA
131 <213> ORGANISM: *Mycobacterium tuberculosis*
133 <400> SEQUENCE: 4
134 atggcagaga tgaagacgca tggccgttacc ctcggccagg aggcaggtaa tttcgagccg 60
136 atctccggcg acctggaaac ccagatcgac cagggtggatc cgcacggcagg ttcgttgcag 120
138 ggcgcgtgc ggcggccggc qggggacggcc gcccaggccg cggatggatc cttccaaagaa 180
140 qcagccaaata aycagaagca ggaactcgac gagatctcgat cgaatattcg tcaaggccgc 240
142 gtccaaatact cggggccgc cggaggccgc cgcggccgc tgcgttgcgc aatgggttc 300
144 tg
147 <210> SEQ ID NO: 5
148 <211> LENGTH: 100
149 <212> TYPE: PRT
150 <213> ORGANISM: *Mycobacterium tuberculosis*
152 <400> SEQUENCE: 5
154 Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly
155 1 5 10 15
157 Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val
158 20 25 30
160 Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly
161 35 40 45
163 Thr Ala Ala Gln Ala Ala Val Val Arg Phe Gln Glu Ala Ala Asn Lys
164 50 55 60
166 Gln Lys Gln Glu Leu Asp Glu Ile Ser Thr Asn Ile Arg Gln Ala Gly

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Input Set : A:\ES.txt
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167 65 70 75 80
169 Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln Gln Gln Ala Leu Ser Ser
170 85 90 95
172 Gln Met Gly Phe
173 100
175 <210> SEQ ID NO: 6
176 <211> LENGTH: 49
177 <212> TYPE: PRT
178 <213> ORGANISM: Mycobacterium tuberculosis
180 <400> SEQUENCE: 6
182 Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly
183 1 5 10 15
185 Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val
186 20 25 30
188 Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly
189 35 40 45
191 Thr
194 <210> SEQ ID NO: 7
195 <211> LENGTH: 42
196 <212> TYPE: PRT
197 <213> ORGANISM: Mycobacterium tuberculosis
199 <400> SEQUENCE: 7
201 Gln Glu Ala Ala Asn Lys Gln Lys Glu Leu Asp Gly Ile Ser Thr
202 1 5 10 15
204 Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln
205 20 25 30
207 Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
208 35 40
210 <210> SEQ ID NO: 8
211 <211> LENGTH: 21
212 <212> TYPE: PRT
213 <213> ORGANISM: Mycobacterium tuberculosis
215 <400> SEQUENCE: 8
217 Gln Glu Ala Gly Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Tyr Thr
218 1 5 10 15
220 Gln Ile Asp Gln Val
221 20
223 <210> SEQ ID NO: 9
224 <211> LENGTH: 16
225 <212> TYPE: PRT
226 <213> ORGANISM: Mycobacterium tuberculosis
228 <400> SEQUENCE: 9
230 Gly Asp Leu Lys Thr Gln Ile Asp Gln Val Glu Ser Thr Ala Gly Ser
231 1 5 10 15
233 <210> SEQ ID NO: 10
234 <211> LENGTH: 16
235 <212> TYPE: PRT
236 <213> ORGANISM: Mycobacterium tuberculosis
238 <400> SEQUENCE: 10

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Input Set : A:\ES.txt
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240 Gly Ser Leu Gln Gln Trp Arg Gly Ala Ala Gly Thr Ala Ala Ala
241 1 5 10 15
243 <210> SEQ ID NO: 11
244 <211> LENGTH: 16
245 <212> TYPE: PRT
246 <213> ORGANISM: *Mycobacterium tuberculosis*
248 <400> SEQUENCE: 11
250 Gln Glu Ala Ala Asn Lys Gln Lys Glu Leu Asp Glu Ile Ser Thr
251 1 5 10 15
253 <210> SEQ ID NO: 12
254 <211> LENGTH: 28
255 <212> TYPE: PRT
256 <213> ORGANISM: *Mycobacterium tuberculosis*
258 <400> SEQUENCE: 12
260 Ser Thr Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu
261 1 5 10 15
263 Glu Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
264 20 25
266 <210> SEQ ID NO: 13
267 <211> LENGTH: 16
268 <212> TYPE: PRT
269 <213> ORGANISM: *Mycobacterium tuberculosis*
271 <400> SEQUENCE: 13
273 Arg Ala Asp Glu Glu Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
274 1 5 10 15
276 <210> SEQ ID NO: 14
277 <211> LENGTH: 21
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial/Unknown
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: (...)
284 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
287 <400> SEQUENCE: 14
288 ctgcagcagg tgacgtcggtt g 21
291 <210> SEQ ID NO: 15
292 <211> LENGTH: 23
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial/Unknown
296 <220> FEATURE:
297 <221> NAME/KEY: misc_feature
298 <222> LOCATION: (...)
299 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
303 <400> SEQUENCE: 15
304 ccgggtggcc gggaaatctg tgt 23
307 <210> SEQ ID NO: 16
308 <211> LENGTH: 23
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial/Unknown

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Input Set : A:\ES.txt
Output Set: N:\CRF3\12292000\I462480.raw

RE:
KEY: misc_feature
TON: ()..()
INFORMATION: Description of Artificial Sequence: synthetic DNA
NCE: 16
ccttctacct tcc 23
D NO: 17
H: 39
DNA
ISM: Artificial/Unknown
RE:
KEY: misc_feature
TON: ()..()
INFORMATION: Description of Artificial Sequence: synthetic DNA
NCE: 17
ggtagccaggat gacgtcggtt ttcagccag 39
D NO: 18
H: 39
DNA
ISM: Artificial/Unknown
RE:
KEY: misc_feature
TON: ()..()
INFORMATION: Description of Artificial Sequence: synthetic DNA
NCE: 18
ggatccctcggt agtcggccgc catgacaac 39
D NO: 19
H: 31
DNA
ISM: Artificial/Unknown
RE:
KEY: misc_feature
TON: ()..()
INFORMATION: Description of Artificial Sequence: synthetic DNA
NCE: 19
cagggtgacgt cgttgttcag c 31
D NO: 20
H: 31
DNA
ISM: Artificial/Unknown
RE:
KEY: misc_feature
TON: ()..()
INFORMATION: Description of Artificial Sequence: synthetic DNA
NCE: 20
cagggtgacgt cgttgttcag c 31
D NO: 21
H: 32
DNA

Please Note:

Please Note: Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

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Output Set: N:\CRF3\12292000\I462480.raw

L:607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34